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Ken Mashitani

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MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

ZHANG, FAN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's remarks filed on August 04, 2010 have been acknowledged but not found persuasive. Currently claims 1-21 remain rejected.

With respect to amended independent claim 1, Applicant's Attorney argues that Takemoto reference is silent on "viewpoint-number information for selecting one or more two-dimensional images of the plurality of two-dimensional images of different viewpoints for presentation as a two-dimensional image or stereoscopic image respectively." Examiner respectfully disagrees. Takemoto clearly teaches the cited limitation in p0045: "a compressing unit which selects display elements, which are actually used in a stereoscopic image, from an input parallax image (two-dimensional image), and composes drawing elements by means of a combination of the display elements... transmits a plurality of the compressed parallax images with different viewpoints to the terminal...and a composing unit which composes the stereoscopic image by extracting the drawing elements from each of the plurality of the received parallax images." Takemoto further discloses the limitation in p0135: "A set of separate images can form a stereoscopic image, however each separate image itself is just a normal two-dimensional image... A separate image 32 denoted as the 'image of viewpoint (4, 2)' of the 16 images assumes the viewpoint (4, 2)..." Takemoto further prescribes in p0160-p0163 the number of horizontal and vertical viewpoints assumed in a stereoscopic; and in p0175-p0179 Takemoto clearly defines exactly which number of viewpoints corresponding to each two-

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dimensional image in both horizontal and vertical directions assumed in a stereoscopic. Examiner explicitly cited p0045, p0135, and p0175-p0183 of Takemoto reference for factual and evidential teaching of the corresponding limitations. Examiner does not understand Applicant's Attorney's allegation on that by citing p0045, p0175-p0183 Examiner has not discharged burden of identifying corresponding elements disclosed in the reference. Examiner strongly believes that Applicant's Attorney would have the responsibility and capability on reviewing and understanding the cited prior art references in a full and entire manner in order to help move the prosecution forward. Examiner encourages Applicant's Attorney to initiate an interview to further discuss issues related to the rejection or the prior art references should any of them are not clear to Applicant's Attorney. The amendments have failed to overcome the previously cited references.

Response to Amendments

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 (b) that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1, 5, 6, 8-11, 13-17, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference).

Regarding claim 1 (currently amended), Takemoto et al teach: A stereoscopic vision-use image providing method for providing as data a plurality of two-dimensional images of different viewpoints for use as stereoscopic vision-use images [p0135], the method comprising the steps of: providing, by a computer, the two-dimensional image data [p0041]; and attaching, by the computer, attached information to the two-dimensional image data [p0139, p0140], the attached information including: viewpoint-number information allotted to each two-dimensional image data, or information for obtaining, by an arithmetic calculation on a receiver side, viewpoint-number information in each two-dimensional image area in image data [abstract]; and viewpoint-number information as information for selecting one or more two-dimensional images of the plurality of two-dimensional images of different viewpoints for presentation as a two-dimensional image or stereoscopic image respectively [p0045, p0135, p0175-p0183].

Regarding claim 5 (currently amended), Takemoto et al further teach: A stereoscopic vision-use image providing method according to any one of claims 1 to 4, wherein attached information further includes display-manner information indicating in what manner the two-dimensional image data selected by the information for selecting is to be displayed [p0140-p0146].

Regarding claim 6 (currently amended), Takemoto et al further teach: A stereoscopic vision-use image providing method according to any one of claims 1 to 4, wherein the attached information further includes purpose-of-use information indicating for what purposes the two-dimensional image data selected by the information for selecting is to be used [p0140-p0146 (Purpose of use of an image is indicated as whether or not the image is for stereovision.)].

Regarding claim 8 (currently amended), Takemoto et al further teach: A stereoscopic vision-use image providing method according to any one of claims 1 to 4, wherein the attached information further includes information indicating what description formats are adopted as a description format of the information [p0029, p0139 (The predetermined prescribed coding format is considered as a description format.)].

Regarding claim 9 (currently amended), Takemoto et al further teach: A stereoscopic vision-use image providing method according to any one of claims 1 to 4, wherein the attached information is provided by any one of broadcasting, communicating, or recording into a recording medium [abstract].

Regarding claim 10 (currently amended), Takemoto et al teach: A stereoscopic image display apparatus for creating stereoscopic vision-use images based on a plurality of two-dimensional image data of different viewpoints

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[abstract, p0002], comprising: a means for obtaining, from attached information attached to the two-dimensional image data, viewpoint-number information of each two-dimensional image and viewpoint-number information as information for selecting the two-dimensional images [p0031]; and a means, in a case of executing a process in which it is needed to select one or more two-dimensional image data of the plurality of two-dimensional images of different viewpoints for presentation as a two-dimensional image or stereoscopic image respectively for selecting the two-dimensional image data specified by the viewpoint-number information as information for selecting the two-dimensional images [p0128, p0135, p0175-p0183].

Regarding claim 11 (currently amended), Takemoto et al teach: A stereoscopic image display apparatus according to claim 10, wherein the selecting means is configured to select a certain number of the two-dimensional image data according to an order of alignment of the viewpoint-number information as information for selecting the two-dimensional images [p0264, p0265, p0282-p0285 (Proper order and reverse order are considered as order of alignment.)].

Claim 13 (currently amended) has been analyzed and rejected with regard to claim 5; and in accordance with Takemoto et al's further teaching on: a means for performing an image display according to the display manner based on the selected two-dimensional image data and the display manner information

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[p0026-p0028].

Regarding claim 14 (currently amended), Takemoto et al further teach:

A stereoscopic image display apparatus according to any one of claims 10 to 13, wherein the process which is not a primary stereoscopic vision-use image process is a process for displaying on a screen one or a plurality of the two-dimensional image data by applying thereto a reduction-in-size process in order to show contents of the plurality of the two-dimensional image data of different viewpoints [p0053, p0133].

Regarding claim 15 (currently amended), Takemoto et al further teach:

A stereoscopic image display apparatus according to any one of claims 10 to 13, wherein the process is a process for selecting, out of a plurality of two-dimensional image data of different viewpoints [p0044, p0193], one or a plurality of the two-dimensional image data for use of at least one of a print-out and an image delivery [p0045, p0132 (Transmission of an image is considered as image delivery.)].

Claim 16 (currently amended) has been analyzed and rejected with regard to claims 10 and 6.

Claim 17 (currently amended) has been analyzed and rejected with regard to claim 10. Also see p0041. Notice, the number of images selected

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under PSH and PSV of p0175-p0182 can be less than the number of images defined under VPH and VPV of [p0160-p0165].

Regarding claim 21 (currently amended), Takemoto et al further teach:

A stereoscopic image display apparatus according to any one of claims 10 to 13, comprising a means for obtaining, from the attached information, information indicating what description formats as a description format of the information is adopted, wherein, in a case of being capable of obtaining the information, a content of the attached information is recognized based on the description format indicated in the information [p0140-p0147, p0189-p0191].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3, 4, 7, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference).**

Regarding claim 3 (currently amended), Takemoto et al further teach: A stereoscopic vision-use image providing method according to claim 1, wherein

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the viewpoint-number information is information for selecting two or more of the two-dimensional images [p0045, p0175-p0183].

Takemoto et al do not explicitly list the viewpoint-number information in order of priority. However, Takemoto et al teach order of priority of viewpoint in [p0240, p0282-p0285 (Identifying a start position for displaying images is considered as arranging images in priority order.)]. Therefore, it would have been obvious for an ordinary skilled in the art to modify Takemoto et al's teaching to list viewpoint number information in an order of starting from a predefined starting position in the header for the purpose of properly organizing information for defining an appropriate starting position.

Regarding claim 7 (currently amended), the rejection applied to claim 6 has been incorporated herein. Although Takemoto et al do not use "0" and "1" to indicate validity/invalidity of purpose of use, Takemoto et al apply "0" and "1" for indicating validity/invalidity of other information such as boundary process existing or not and same arrangement of camera or not as prescribed in [p0148-p0150, p0167-p0169]. Therefore, it would have been obvious for an ordinary skilled in the art to apply "0" and "1" to DIM region to indicate whether or not the image is for stereovision for the purpose of presenting clear and obvious indication per user preference.

Regarding claim 19 (currently amended), Takemoto et al further teach:
A stereoscopic image display apparatus according to claim 17, comprising a

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means for obtaining information indicating whether or not the plurality of two-dimensional images are an endless series of images, in which any two adjacent viewpoints, including the images at each end of the series, are continuous, wherein, when obtaining the information indicating that the plurality of two-dimensional images are the endless series of images, a first two-dimensional image and a last two-dimensional image in the plurality of two-dimensional images are included in the selected two-dimensional images [figs. 35a, 35b (For images in those endless series the first and the last images always exist no matter how shifting is performed.)]. Although Takemoto et al do not specifically include in an attached header the information indicating whether a series of images are endless, Takemoto et al prescribe and illustrate various consequences on images in a series from being shifted based on the information. Therefore, it would have been obvious for an ordinary skilled in the art to modify Takemoto et al's teaching to add an indication in a header whether a series of images are endless for the purpose of image status indication per user preference.

Claim 4 (currently amended) has been analyzed and rejected with regard to claim 19.

Regarding claim 20 (currently amended), Takemoto et al further teach:
A stereoscopic image display apparatus according to claim 17, comprising a means for obtaining information indicating whether or not the plurality of two-

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dimensional images are not an endless series of images, wherein, when obtaining the information indicating that the plurality of two-dimensional images are not the endless series of images, in a case that a first two-dimensional image and a last two-dimensional image in the plurality of two-dimensional images exist in the selected two-dimensional image of predetermined numbers, the selected image is shifted so that the first two-dimensional image or the last two-dimensional image are eliminated so as to newly select one or more of the two-dimensional images [p0265, p0265 figs. 34a, 34b (The images are shifted in those limited (non-endless) series so that the first and last images from before shifting are eliminated after shifting.)]. Although Takemoto et al do not specifically include in an attached header the information indicating whether a series of images are endless, Takemoto et al prescribe and illustrate various consequences on images in a series from being shifted based on the information. Therefore, it would have been obvious for an ordinary skilled in the art to modify Takemoto et al's teaching to add an indication in a header whether a series of images are endless for the purpose of image status indication per user preference.

6. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference) and in further view of Tahara et al (US Patent: 6,671,323).

Regarding claim 2 (currently amended), Takemoto et al teach: A

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stereoscopic vision-use image providing method according to claim 1, wherein the viewpoint-number information is information for selecting two or more of the two-dimensional images [p0045, p0175-p0183].

Although Takemoto et al do not explicitly include order-of-priority information in attached header, Takemoto et al disclose: order-of-priority information indicating an order-of-priority of the selected viewpoint numbers, together with the two-dimensional image data [p0240, p0282-p0285 (A start position is considered an order of priority information.)]. In the same field of endeavor, Tahara et al include picture order information as part of data ID in [fig. 15]. Recording and applying image order information have been practiced in the art as prescribed by Takemoto et al and Tahara et al. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of the two to include order of priority information of viewpoint numbers as a part of header for the purpose of easy managing and further utilizing related information.

Claim 12 (currently amended) has been analyzed and rejected with regard to claims 10, 2, and 3.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference) and in further view of Suzuki et al (US Pub: 2003/0012425).

Regarding claim 18 (currently amended), Takemoto et al further teach selecting two-dimensional image placed at any position among a series of

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images in [p0240]. In the same field of endeavor, Suzuki et al teach selecting the middle point of various viewpoint positions as a base point in [p0153]. Therefore, selecting viewpoint number matching center position as a starting point would have been an obvious alternative of Takemoto et al's suggestion to an ordinary skilled in the art per user preference for design choice purpose.

Conclusion

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fan Zhang whose telephone number is (571) 270-3751. The examiner can normally be reached on Mon-Fri from 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Zhang/

Patent Examiner

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625